U.S. Appln. Serial No: 10/656,171 Attorney Docket No: 033582R0041

IN THE CLAIMS:

Please cancel claim 9 without prejudice or disclaimer and add the following claims:

Claim 10 (new): A fluid mixing device, for the continuous mixing of two or more fluids, comprising:

a mixing chamber having fluid contact surface means defining an internal chamber region;

at least one fluid inlet means provided in said fluid contact surface means, for feeding at least one fluid into said chamber region;

at least one fluid outlet means provided in said fluid contact surface means, for feeding fluid out of said chamber region;

fluid mixing means within said chamber region, capable of inducing mixing of two or more fluids within a mixing region;

wherein said fluid inlet means including a valve means comprising:

a body portion having at least one fluid entrance aperture, for allowing fluid to flow into said body portion;

a fluid exit aperture, for allowing fluid to flow from said body portion into said chamber region;

entrance aperture sealing means having entrance aperture biasing means for biasing said entrance aperture sealing means into a sealing position in which said fluid entrance aperture is sealed; and

exit aperture sealing means having exit aperture biasing means for biasing said exit aperture sealing means into a sealing position in which said fluid exit aperture is sealed;

said entrance and exit aperture sealing means being adapted to allow passage of fluid respectively into said body portion through said entrance aperture and out of said body portion through said exit aperture, according to a first specified pressure differential

between the pressure externally of said entrance aperture and the pressure in said chamber region.

Claim 11 (new): A fluid mixing device according to claim 10, wherein said entrance and exit aperture biasing means are adapted to bias said respective entrance and exit aperture sealing means into their sealed positions, according to a second specified pressure differential between the pressure externally of said entrance aperture and the pressure in said chamber region, said second specified pressure differential being less than said first specified pressure differential.

Claim 12 (new): A fluid mixing device according to claim 11, wherein said second specified pressure differential is of the order of 1 Kg cm⁻².

Claim 13 (new): A fluid mixing device, for the continuous mixing of two or more fluids, comprising:

a mixing chamber having a fluid contact surface defining an internal chamber region;

a fluid inlet opening out at the fluid contact surface and through which at least one fluid is feedable into said internal chamber region;

a fluid outlet opening out at said fluid contact surface and through which fluid is feedable out of said internal chamber region;

a fluid mixer within said internal chamber region, capable of inducing mixing of two or more fluids within a mixing region in said internal chamber region;

a fluid inlet valve provided in said fluid inlet, said fluid inlet valve comprising;
a body portion having at least one fluid entrance aperture, for allowing fluid to flow into said body portion;

U.S. Appln. Serial No: 10/656,171 Attorney Docket No: 033582R0041

a fluid exit aperture, for allowing fluid to flow from said body portion into said internal chamber region;

an entrance aperture sealing device having an entrance aperture seal and an entrance aperture biasing device which biases said entrance aperture seal into a sealing position in which said fluid entrance aperture is sealed; and

an exit aperture sealing device having an exit aperture seal and an exit aperture biasing device which biases said exit aperture seal into a sealing position in which said fluid exit aperture is sealed;

said entrance and exit aperture sealing devices being adapted to allow passage of fluid respectively into said body portion through said entrance aperture and out of said body portion through said exit aperture according to a first specified pressure differential between the pressure external to said entrance aperture and the pressure in said internal chamber region.

Claim 14 (new): A fluid mixing device according to claim 13, wherein said entrance and exit aperture biasing devices are adapted to bias said respective entrance and exit aperture seals into their sealed positions, according to a second specified pressure differential between the pressure external to said entrance aperture and the pressure in said chamber region, said second specified pressure differential being less than said first specified pressure differential.

Claim 15 (new): A fluid mixing device according to claim 14, wherein said second specified pressure differential is of the order of 1 Kg cm⁻².